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### Appendix 1 - NPS 2015 Grant

#### WEST VIRGINIA NONPOINT SOURCE PROGRAM Grant Funds: \$319(h)

BUDGET PERIOD FY 2015

**OCTOBER 1, 2014 THROUGH SEPTEMBER 30, 2019**

<b>Nonpoint Program Funds</b>		<u>319 Request</u>	<u>Match</u>	<u>Total</u>
WV Dept. of Env. Protection	Adm/Statewide Programs	\$409,631	\$272,799	\$682,430
WV Conservation Agency	Adm/Statewide Programs	\$116,000	\$77,334	\$193,334
Friends of the Cheat	Big Sandy Project Planning	\$84,000	\$56,500	\$140,500
US EPA Region 3	Grants & Watershed Tracking	\$10,000	\$6,667	\$16,667
<b>Total Nonpoint</b>		<b>\$619,631</b>	<b>\$413,300</b>	<b>\$1,032,931</b>
<b>Watershed Project Funds</b>				
<u>Organization</u>	<u>Project</u>	<u>319 Request</u>	<u>Match</u>	<u>Total</u>
Canaan Valley Institute	Tuscarora Creek	\$56,523	\$33,880	\$90,403
Canaan Valley Institute	Mill Creek Opequon	\$161,801	\$93,802	\$255,603
Morris Creek Watershed Assoc.	Upper Mainstem	\$49,265	\$50,670	\$99,935
Friends of the Cheat	Pase Active Treatment	\$101,387	\$67,500	\$168,887
Friends of Deckers Creek	Valley Highwall Upgrade	\$170,500	\$113,433	\$283,933
Plateau Action Network	Summerlee - Phase 2	\$163,412	\$140,108	\$303,520
Piney Creek Watershed Assoc.	YMCA land restoration	\$20,145	\$13,800	\$33,945
WV Conservation Agency	Elks Run Watershed	\$68,200	\$45,780	\$113,980
WV Water Research Institute	Herods Run	\$226,145	\$162,010	\$388,155
<b>Total Watershed</b>		<b>\$1,017,378</b>	<b>\$720,983</b>	<b>\$1,738,361</b>
<b>Total Grant</b>		<b>\$1,637,009</b>	<b>\$1,134,283</b>	<b>\$2,771,292</b>
<b>CBIG Funding</b>				
<u>Organization</u>	<u>Project</u>	<u>CBIG</u>	<u>Match</u>	<u>Total</u>
Canaan Valley Institute	Tuscarora Creek	\$31,309	\$31,403	\$62,712
Canaan Valley Institute	Mill Creek Opequon	\$98,172	\$97,679	\$195,851
WV Conservation Agency	Elks Run Watershed	\$50,500	\$50,500	\$101,000
		<b>\$179,981</b>	<b>\$179,582</b>	<b>\$359,563</b>

Through negotiation with the various organizations and the Project Teams associated with developing the project proposal, the NPS Program was able to reduce the budgets to the current request level. This was in large part due to the recent signing of the Chesapeake Bay Program Agreement, which made available a substantial amount of project money for the Bay watersheds. The NPS Program assisted the Project Teams in West Virginia's Potomac Basin in developing proposals that would fit within the Bay funding.

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### Appendix 2 – BMPs implemented in 2014

Year	Project	BMP	Date	BMP#	Units	Totals
2010	Back Creek - Second Creek	Alternate Water	Mar-14	6	unit	
2010	Milligan Creek Ag-BMPs	Alternate Water	Mar-14	4	unit	
2010	Second Creek	Alternate Water	Aug-14	6	unit	
2011	Kitchen Creek 2	Alternate Water	Sep-14	3	unit	
2012	Milligan Creek/Davis Springs	Alternate Water	Mar-14	8	unit	
2013	WV Conservation Agency	Alternate Water	Sep-14	3	unit	30
2014	WV Conservation Agency	Cover crop	Sep-14	182	ac	182
2014	WV Conservation Agency	Critical area planting	Mar-14	5	ac	5
2013	WV Conservation Agency	Erosion control	Sep-14	8	ac	
2014	WV Conservation Agency	Erosion control	Mar-14	2	ac	
2014	WV Conservation Agency	Erosion control	Sep-14	0	ac	
2014	WV Conservation Agency	Erosion control	Sep-14	0	ac	
2014	WV Conservation Agency	Erosion control	Sep-14	0	ac	
2014	WV Conservation Agency	Erosion control	Sep-14	1	ac	
2014	WV Conservation Agency	Erosion control	Sep-14	1	ac	13
2010	Back Creek - Second Creek	Fence	Mar-14	7,800	ft	
2010	Lost River NSD	Fence	Sep-14	1,000	ft	
2010	Milligan Creek Ag-BMPs	Fence	Mar-14	24,609	ft	
2010	Second Creek	Fence	Aug-14	7,800	ft	
2012	Milligan Creek/Davis Springs	Fence	Mar-14	23,865	ft	
2013	WV Conservation Agency	Fence	Sep-14	9,783	ft	
2014	WV Conservation Agency	Fence	Sep-14	109	ac	74,966
2010	Lost River NSD	Grazing system	Sep-14	1	unit	
2010	Milligan Creek Ag-BMPs	Grazing system	Sep-14	680	ac	
2011	Kitchen Creek 2	Grazing system	Sep-14	2	unit	
2012	Milligan Creek/Davis Springs	Grazing system	Sep-14	1,234	ac	
2014	WV Conservation Agency	Grazing system	Sep-14	159	ac	2,076
2012	Fayette Square	Infiltration trench	Sep-14	1	unit	1
2012	Fayette Square	Infiltration basin	Aug-14	1	unit	1
2013	Summerlee Phase 1.2	Limestone channel	Sep-14	1	unit	1
2010	Back Creek - Second Creek	Livestock crossing	Sep-14	2	unit	
2010	Second Creek	Livestock crossing	Aug-14	2	unit	
2011	Kitchen Creek 2	Livestock crossing	Sep-14	4	unit	
2013	WV Conservation Agency	Livestock crossing	Sep-14	1	unit	9
2014	WV Conservation Agency	Livestock protection area	Sep-14	6	ac	6
2010	Milligan Creek Ag-BMPs	Nutrient mgmt	Mar-14	653	ac	
2010	Second Creek	Nutrient mgmt	Sep-14	105	ac	
2011	Kitchen Creek 2	Nutrient mgmt	Sep-14	2	unit	
2012	Milligan Creek/Davis Springs	Nutrient mgmt	Sep-14	1,234	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	19	unit	

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Year	Project	BMP	Date	BMP#	Units	Totals
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	6	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	30	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	1,200	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	20	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	22	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	20	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	66	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	581	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	10	ac	
2013	WV Conservation Agency	Nutrient mgmt	Sep-14	51	ac	
2014	WV Conservation Agency	Nutrient mgmt	Sep-14	35	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	66	ac	
2014	WV Conservation Agency	Nutrient mgmt	Sep-14	19	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	336	ac	
2014	WV Conservation Agency	Nutrient mgmt	Sep-14	37	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	31	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	52	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	8	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	68	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	5	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	10	ac	
2014	WV Conservation Agency	Nutrient mgmt	Mar-14	1,200	ac	
2014	WV Conservation Agency	Nutrient mgmt	Sep-14	31	ac	
2014	WV Conservation Agency	Nutrient mgmt	Sep-14	4	ac	5,920
2010	Tuscarora D&G	Outreach/education	Sep-14			
2012	Fayette Square	Outreach/education	Sep-14			
2010	Upper Muddy Creek	AMD passive treatment	Sep-14	1	unit	1
2010	Henry St stormwater	Pollution prevention plan	Sep-14	1	unit	1
2010	Lost River NSD	Riparian buffer	Sep-14	30	ac	
2010	Milligan Creek Ag-BMPs	Riparian buffer	Mar-14	17	ac	
2011	Kitchen Creek 2	Riparian buffer	Sep-14	31	ac	
2012	Milligan Creek/Davis Springs	Riparian buffer	Mar-14	134	ac	
2013	WV Conservation Agency	Riparian buffer	Sep-14	1,567	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	2,151	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	600	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	1,200	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	300	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	1,567	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	2,726	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	600	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	300	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	2,080	ft	

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Year	Project	BMP	Date	BMP#	Units	Totals
2013	WV Conservation Agency	Riparian buffer	Sep-14	2,159	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	2,640	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	992	ft	
2013	WV Conservation Agency	Riparian buffer	Sep-14	300	ft	
2013	Knapp Creek	Riparian buffer	Sep-14	2	ac	19,395
2010	Milligan Creek Ag-BMPs	Spring development	Mar-14	2	unit	2
2010	Lost River NSD	Stream restoration	Sep-14	1,700	ft	
2010	Winding Gulf Restoration	Stream restoration	Sep-14	350	ft	
2013	WV Conservation Agency	Stream restoration	Sep-14	900	ft	
2013	Knapp Creek	Stream restoration	Mar-14	1,790	ft	
2014	WV Conservation Agency	Stream restoration	Sep-14	348	ft	
2013	Knapp Creek	Streambank protection	Sep-14	861	ft	5,949
2012	Fayette Square	Vegetative strip	Sep-14	1	unit	1
2011	Muddy Creek - Greenbrier	Septic pumping	Mar-14	17	unit	
2010	NF Elkhorn OSLP	Septic system	Mar-14	4	unit	
2010	Ashland Retrofit	Septic system (alternate)	Sep-14	1	unit	
2011	Muddy Creek - Greenbrier	Septic system	Mar-14	2	unit	24
2013	Summerlee Phase 1.2	Wetland enhancement	Sep-14	1	unit	1

### Appendix 3 – Load reductions reported in 2014

Year	Project	LR	Pollutant	Units	Totals
2010	Upper Muddy Creek	1,500.0	Acidity	lbs/yr	
2013	Summerlee Phase 1.2	91,409.0	Acidity	lbs/yr	92,909.0
2010	Upper Muddy Creek	2,400.0	Aluminum	lbs/yr	
2013	Summerlee Phase 1.2	3,323.0	Aluminum	lbs/yr	5,723.0
2010	Back Creek - Second Creek	7.95E+12	Coliform	cfu	
2010	NF Elkhorn OSLP	6.11E+12	Coliform	cfu	
2010	Lost River NSD	6.94E+14	Coliform	cfu	
2010	Milligan Creek Ag-BMPs	9.21E+12	Coliform	cfu	
2010	Milligan Creek Ag-BMPs	3.48E+12	Coliform	cfu	
2010	Second Creek	5.68E+13	Coliform	cfu	
2010	Henry St stormwater	6.82E+10	Coliform	cfu	
2010	Kitchen Creek 3 Phase 2	2.37E+12	Coliform	cfu	
2011	DWWM-NPS	6.22E+08	Coliform	cfu	
2011	Kitchen Creek 2	2.58E+13	Coliform	cfu	
2011	Elk Run	3.32E+12	Coliform	cfu	
2011	Muddy Creek - Greenbrier	1.43E+15	Coliform	cfu	
2011	Muddy Creek - Greenbrier	6.09E+11	Coliform	cfu	
2012	Milligan Creek/Davis Springs	2.22E+13	Coliform	cfu	
2012	Milligan Creek/Davis Springs	2.07E+13	Coliform	cfu	
2013	Knapp Creek	2.17E+11	Coliform	cfu	2.28E+15
2010	Upper Muddy Creek	200.0	Iron	lbs/yr	

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Year	Project	LR	Pollutant	Units	Totals
2013	Summerlee Phase 1.2	17,010.0	Iron	lbs/yr	17,210.0
2010	Upper Muddy Creek	560.0	Manganese	lbs/yr	
2013	Summerlee Phase 1.2	1,549.0	Manganese	lbs/yr	2,109.0
2010	DWWM-NPS Program	2.3	Nitrogen	lbs/yr	
2010	DWWM-NPS Program	1.2	Nitrogen	lbs/yr	
2010	Lost River NSD	403.6	Nitrogen	lbs/yr	
2011	DWWM-NPS Program	4.6	Nitrogen	lbs/yr	
2011	DWWM-NPS Program	1.2	Nitrogen	lbs/yr	
2011	DWWM-NPS Program	0.9	Nitrogen	lbs/yr	
2012	Fayette Square	3.4	Nitrogen	lbs/yr	
2012	DWWM-NPS Program	3.5	Nitrogen	lbs/yr	
2013	WV Conservation Agency	46,921.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	45,492.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	1,500.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	4,300.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	783.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	77.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	173.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	442.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	135.0	Nitrogen	lbs/yr	
2013	WV Conservation Agency	36.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	90,114.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	783.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	3,100.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	5,460.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	400.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	788.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	34,294.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	7,970.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	82.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	23.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	19,024.0	Nitrogen	lbs/yr	
2014	WV Conservation Agency	645.0	Nitrogen	lbs/yr	262,962.7
2010	DWWM-NPS Program	1.4	Phosphorous	lbs/yr	
2010	DWWM-NPS Program	0.7	Phosphorous	lbs/yr	
2010	Lost River NSD	1,356.2	Phosphorous	lbs/yr	
2011	DWWM-NPS Program	2.7	Phosphorous	lbs/yr	
2011	DWWM-NPS Program	0.3	Phosphorous	lbs/yr	
2011	DWWM-NPS Program	0.1	Phosphorous	lbs/yr	
2012	Fayette Square	5.8	Phosphorous	lbs/yr	
2012	DWWM-NPS	2.0	Phosphorous	lbs/yr	
2013	WV Conservation Agency	880.0	Phosphorous	lbs/yr	

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Year	Project	LR	Pollutant	Units	Totals
2013	WV Conservation Agency	2,000.0	Phosphorous	lbs/yr	
2013	WV Conservation Agency	196.0	Phosphorous	lbs/yr	
2013	WV Conservation Agency	344.0	Phosphorous	lbs/yr	
2013	WV Conservation Agency	92.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	57,018.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	2,000.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	660.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	1,830.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	300.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	858.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	36,149.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	1,130.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	196.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	58.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	58.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	20,670.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	1,020.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	831.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	555.0	Phosphorous	lbs/yr	
2014	WV Conservation Agency	1,155.0	Phosphorous	lbs/yr	129,369.2
2010	Back Creek - Second Creek	4,551.0	Sediment	tons/yr	
2010	Lost River NSD	391.0	Sediment	tons/yr	
2010	Winding Gulf Restoration	4.0	Sediment	tons/yr	
2013	WV Conservation Agency	12.0	Sediment	tons/yr	
2013	WV Conservation Agency	3.7	Sediment	tons/yr	
2013	WV Conservation Agency	683.0	Sediment	tons/yr	
2013	WV Conservation Agency	442.0	Sediment	tons/yr	
2013	WV Conservation Agency	1,500.0	Sediment	tons/yr	
2013	WV Conservation Agency	25.4	Sediment	tons/yr	
2014	WV Conservation Agency	39.0	Sediment	tons/yr	
2014	WV Conservation Agency	10.0	Sediment	tons/yr	
2014	WV Conservation Agency	67.0	Sediment	tons/yr	
2014	WV Conservation Agency	35.0	Sediment	tons/yr	
2014	WV Conservation Agency	4.0	Sediment	tons/yr	
2014	WV Conservation Agency	29.0	Sediment	tons/yr	
2014	WV Conservation Agency	1.9	Sediment	tons/yr	
2014	WV Conservation Agency	2.8	Sediment	tons/yr	
2014	WV Conservation Agency	1.9	Sediment	tons/yr	
2014	WV Conservation Agency	0.7	Sediment	tons/yr	7,803.4
2010	DWWM-NPS Program	162.2	Suspended solids	lbs/yr	
2010	DWWM-NPS Program	81.1	Suspended solids	lbs/yr	
2011	DWWM-NPS Program	324.4	Suspended solids	lbs/yr	



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Year	Project	LR	Pollutant	Units	Totals
2011	DWWM-NPS Program	9.8	Suspended solids	lbs/yr	
2011	DWWM-NPS Program	7.5	Suspended solids	lbs/yr	
2012	Fayette Square	405.5	Suspended solids	lbs/yr	
2012	DWWM-NPS Program	243.3	Suspended solids	lbs/yr	1,233.8

### Appendix 4 – BMP data reported to the Bay Program in 2014

<i>Agricultural practices</i>	Unit	2014 Progress	2013 Milestone	2015 Milestone	2017 WIP	2014 Progress	2015 Milestone	2017 WIP
Nutrient Application Management on Crop	acres	30,396	126,000	31,160	90,000	16.5%	18.4%	54.2%
Crop Nutrient Management	acres	30,396	126,000	31,160	90,000	16.5%	18.4%	54.2%
Nutrient Application Management on Pasture	acres	30,903	0	44,840	0	13.2%	18.3%	0.0%
Conservation Tillage including High Residue Tillage	acres	29,010	26,865	19,369	29,865	64.6%	54.7%	79.4%
Cover Crop	acres	3,569	3,991	4,700	3,550	6.9%	11.9%	8.2%
Commodity Cover Crop	acres	2,043	1,905	0	1,450	4.0%	0.0%	3.4%
Cover Crops	acres	5,612	5,896	4,700	5,000	10.9%	11.9%	11.6%
Pasture Alternative Watering	acres	10,777	3,015	11,060	3,015	4.6%	4.5%	1.2%
Prescribed Grazing	acres	131,218	122,423	137,000	123,747	56.0%	56.1%	49.8%
Stream Access Control with Fencing	acres	10,783	10,856	11,097	13,268	44.7%	46.0%	55.0%
Pasture Management	acres	152,778	136,294	159,157	140,030	59.1%	59.3%	51.4%
Forest Buffers on Fenced Pasture Corridor	acres	4,022	450	4,225	1,050	16.7%	17.5%	4.4%
Forest Buffers	acres	59	3,561	67	4,561	0.0%	0.0%	1.0%
Wetland Restoration	acres	208	406	203	406	0.0%	0.0%	0.1%
Land Retirement	acres	3,281	3,067	3,281	4,218	0.8%	0.7%	1.0%
Grass Buffers	acres	2,970	3,085	3,085	3,010	0.7%	0.7%	0.7%
Tree Planting	acres	5,461	5,123	5,450	5,082	1.3%	1.2%	1.2%
Conservation Plans	acres	379,480	388,727	382,330	280,341	86.1%	86.0%	62.9%
Non-Urban Stream Restoration	feet	16,443	14,618	18,167	16,618			
Livestock Waste Management Systems	AU	10,281	11,933	17,145	19,157	12.8%	20.3%	22.7%
Poultry Waste Management Systems	AU	37,832	24,020	35,886	40,142	62.1%	54.8%	63.9%
Animal Waste Management Systems	AU	48,113	35,953	53,031	59,299	34.0%	35.4%	40.3%
Livestock Mortality Composting	AU	389	0	0	337	8.1%	0.0%	6.7%
Poultry Mortality Composting	AU	1,186	0	0	2,338	31.3%	NA	58.5%
Mortality Composting	AU	1,575	0	0	2,675	18.3%	NA	29.5%
Barneyard Runoff Control	acres	532	153	567	52	38.4%		
Loafing Lot Management	acres	18	0	0	0	1.3%		
Animal Feed Operations	acres	550	153	567	52	39.7%	41.6%	3.8%
Manure Transport Outside CBWS	tons	6,323	5,000	10,000	10,000			
Manure Transport Within CBWS	tons	12,579	0	0	0			
Manure Transport	tons	18,902	5,000	10,000	10,000			

<i>Urban/Suburban Practices</i>	Unit	2014 Progress	2013 Milestone	2015 Milestone	2017 WIP	2014 Progress	2015 Milestone	2017 WIP
Wet Ponds & Wetlands	acres	10,978	9,670	10,970	0	8.1%	8.1%	NA
Dry Ponds	acres	451	0	361	0	0.3%	0.3%	NA
Extended Dry Ponds	acres	31,449	29,942	30,964	0	23.3%	22.9%	NA
Infiltration Practices	acres	125	19	107	0	0.1%	0.1%	NA
Filtering Practices	acres	133	28	38	0	0.1%	0.0%	NA
Bioretention	acres	20	0	0	0	0.0%	NA	NA
Bioswale	acres	18	0	0	0	0.0%	NA	NA
Permeable Pavement	acres	0	0	0	0	0.0%	NA	NA
Vegetated Open Channel	acres	6	0	0	0	0.0%	NA	NA
Stormwater Management	acres	43,180	39,660	42,440	0	32.0%	31.3%	0.0%
Erosion and Sediment Control	acres	5,685	11,824	7,733	11,824	98.2%	100.0%	100.0%
Forest Conservation Act	acres	4,418	4,418	4,418	0	4.3%	4.1%	NA
Impervious Surface & Urban Growth Reduction	acres	24	24	24	0	0.0%	0.0%	NA
Urban Forest Buffers	acres	27	21	25	0	0.0%	0.0%	NA



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<i>Urban/Suburban Practices continued</i>	Unit	2014 Progress	2013 Milestone	2015 Milestone	2017 WIP	2014 Progress	2015 Milestone	2017 WIP
Urban Tree Planting	acres	177	143	172	0	0.2%	0.2%	NA
Urban Nutrient Management	acres	0	426	0	0	0.0%	0.0%	NA
Urban Stream Restoration	feet	5,280	5,280	5,280	0			
Street Sweeping	lbs	700,000	227,000	190,000	0			
Abandoned Mine Reclamation	acres	13,974	14,384	14,375	15,295	97.1%	100.0%	100.0%
Septic Connections	systems	868	739	739	0	1.8%	0.9%	0.0%
Septic Denitrification	systems	4	4	4	0	0.0%	0.0%	0.0%
Septic Pumping	systems	3,733	3,000	3,000	0	7.6%	3.8%	0.0%

<i>Resource Practices</i>	Unit	2014 Progress	2013 Milestone	2015 Milestone	2017 WIP	2014 Progress	2015 Milestone	2017 WIP
Forest Harvesting Practices	acres	15,384	16,354	16,131	16,354	96.3%	98.0%	98.0%

### Appendix 5 – Costs for projects completed in 2014

Year	Project name	Date	Allocated	Spent	Funds
2010	WVDEP Nonpoint Source Program	Mar-14	\$1,024,400	\$1,017,640	NPS
2010	Back Creek - Second Creek	Sep-14	\$115,428	\$115,428	Watershed
2010	NF Elkhorn OSLP	Mar-14	\$30,786	\$30,786	Watershed
2010	West Run Phase 1	Mar-14	\$43,509	\$43,445	Watershed
2010	Back Creek Protection Plan	Sep-14	\$30,000	\$30,000	Watershed
2010	Lost River NSD	Sep-14	\$125,000	\$120,000	Watershed
2010	Milligan Creek Ag-BMPs	Sep-14	\$33,000	\$32,978	Watershed
2010	Second Creek	Sep-14	\$182,000	\$102,360	Watershed
2010	Smooth Rock Lick	Mar-14	\$27,467	\$26,797	Watershed
2010	Upper Muddy Creek	Sep-14	\$82,796	\$82,796	Watershed
2010	Henry St Stormwater	Sep-14	\$25,300	\$19,152	Watershed
2010	Kitchen Creek 3 Phase 2	Sep-14	\$98,000	\$98,000	Watershed
2010	Piney Creek WIP	Sep-14	\$26,668	\$11,673	Watershed
2010	Winding Gulf Stream Restoration	Sep-14	\$48,653	\$45,506	Watershed
2010	NF Greens Run Engineering	Sep-14	\$22,997	\$27,006	Watershed
2010	Sovern Titchnell Engineering	Sep-14	\$27,500	\$39,743	Watershed
2010	Ashland Retrofits	Sep-14	\$65,000	\$63,140	Watershed
2010	Tuscarora D&G Prioritization	Sep-14	\$20,000	\$12,523	Watershed
2010	WBP Development	Sep-14	\$166,429	\$166,334	Watershed
2011	WV Conservation Agency	Sep-14	\$276,799	\$266,549	NPS
2011	Kitchen Creek 2	Sep-14	\$49,520	\$49,520	Watershed
2012	Fayette Square Stormwater	Mar-14	\$131,420	\$116,780	Watershed
2012	Milligan Creek/Davis Springs	Sep-14	\$123,060	\$123,060	Watershed
2012	WV Conservation Agency	Sep-14	\$200,000	\$200,000	NPS
2013	Summerlee Remediation Phase 1.2	Sep-14	\$29,733	\$29,733	Watershed
<b>Totals for 2014</b>			<b>\$3,005,465</b>	<b>\$2,870,949</b>	

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### Appendix 6 – Semi-Annual Summary Progress Reports

West Virginia - Fiscal Year 2010, Grant [00350010](#) WV DEPT OF ENVIRONMENTAL PROTECTION

Project	Completed	Project Title
01	✓	<a href="#">DWWM NONPOINT SOURCE PROGRAM</a>
02	✓	<a href="#">OFFICE OF OIL &amp; GAS NONPOINT SOURCE PROGRAM</a>
03	✓	<a href="#">WV Conservation Agency Nonpoint Program</a>
04	✓	<a href="#">Logging Operation Notification Inspection and Enforcement System</a>
05	✓	<a href="#">Slabcamp Run mainstem AMD remediation projects</a>
06	✓	<a href="#">Back Creek of Second Creek Agricultural BMPs</a>
07	✓	<a href="#">Winding Gulf Onsite Wastewater Project</a>
08	✓	<a href="#">Jeff Eanes Beech Run Rd. Remediation Project</a>
09	✓	<a href="#">North Fork of Elkhorn On-site Loan Program</a>
10	✓	<a href="#">Summerlee Bioremediation Project</a>
11	✓	<a href="#">West Run Phase I</a>
12	✓	<a href="#">Watershed Based Plan Development</a>
13	✓	<a href="#">Back Creek Protection Plan</a>
14	✓	<a href="#">Lost River NSD</a>
15	✓	<a href="#">Milligan Creek Ag BMPs</a>
16	✓	<a href="#">Second Creek Improvements</a>
17	✓	<a href="#">Smooth Rock Lick</a>
18	✓	<a href="#">Sandy Run of Kanes Creek Improvements</a>
19	✓	<a href="#">Upper Muddy Creek Improvements</a>
20	✓	<a href="#">Henry St. Stormwater Design</a>
21	✓	<a href="#">Kitchen Creek III Phase 2</a>
22	✓	<a href="#">Piney Creek Watershed Implementation Plan</a>
23	✓	<a href="#">Winding Gulf Stream Restoration</a>
24	✓	<a href="#">NF Greens Run Railroad Refuse Engineering Phase</a>
25	✓	<a href="#">Sovern Run Titchnell Sands Engineering Phase</a>
26	✓	<a href="#">Ashland Retrofits</a>
27	✓	<a href="#">Tuscarora Creek Dirt and Gravel Road Remediation Prioritization</a>

#### **DWWM – Nonpoint Source Program - HUC: Statewide**

This grant is complete, a small balance of about 6,900 remains. AGOs funded with this grant include: three rain gardens one each in the Piney Creek (Shady Springs), Upper Guyandotte (Mullens), and Shenandoah (Shepherdstown); Cluster system design in McDowell County (NF Elkhorn) and outreach in the community as well; and Monitoring support for Friends of the Cheat AMD projects. A major re-programming took place for this grant year, which resulted in the cancellation and/or reduction of several project proposals, and the addition of many new proposals. All of the new proposals were completed and some came in under budget.

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### **WVDEP – Office of Oil and Gas - HUC: Statewide**

This project supported the activities of the DEP's Office of Oil and Gas (OOG) in the promotion of proper best management practice design and installation on oil and gas drilling sites and access roads. It also supported the educational efforts of OOG in establishing training for inspectors and companies as well as the development of OOG components to priority watershed restoration projects. It is complete as of September 2012; all milestones described in the proposal were achieved.

### **WVCA – Nonpoint Source Program - HUC: Statewide**

This project supported the administrative and statewide programs that implements BMPs on agricultural areas, as well as a wide variety of NPS outreach and education efforts. The project was completed as of September 2013; all milestones described in the proposal were achieved.

### **WVDOF - Logging Operation Notification, Inspection and Enforcement System (LONIE) - HUC: Statewide**

This project supported the development and implementation of a new GIS based system that significantly improved the efficiency of WVDOF's systems. The project was completed as of September 2013 and the final report is available for review.

### **Slabcamp Run – AMD Remediation Projects - HUC: 050200030201 WBP: Deckers Creek 2005**

During the 2<sup>nd</sup> reporting period of 2013 the project was terminated because the watershed group couldn't secure a landowner agreement even after multiple attempts.

### **Back Creek of Second Creek Agricultural BMPs - HUC: 050500030701 WBP: Second Creek 2008**

The Second Creek/Karnes Agriculture BMP 319 Implementation Project funded with unobligated FY 2010 funds has been completed as of September 2014 with one exception, a roofed feeding shed. There was difficulty with the contractor (NBC) and legal proceedings were needed in order to get back a deposit that was provided by the landowner. This issue is still pending. More details are provided in the final report.

### **Winding Gulf Onsite Wastewater Project - HUC: 050701010101 WBP: Upper Guyandotte 2006**

The project was completed as of September 2013 but the budget was reduced. CVI used the remaining funds from the original grant to complete an assessment of the wastewater treatment needs for the western portion of Wyoming Co. The project gathered information needed to build a better picture of the wastewater treatment needs. This effort consisted of the following:

1. Maps of the area showing existing public water and wastewater services.
2. Meetings with county, municipal and PSD officials to discuss county infrastructure plans and priorities.
3. A summary report that includes maps, criteria and projects that will be used for moving forward. A final report is available for review.

### **Jeff Eanes Beech Run Rd Remediation Project - HUC: 050200040705 WBP: Lower Cheat 2005**

During the reporting period October 2012 – March 2013 the grant was discontinued. Funds not spent were re-programmed resulting in additional project proposals.

### **North Fork of Elkhorn Onsite Loan Program - HUC: 050702010202 WBP: North Fork of Elkhorn 2007**

The project was completed as of March 2014; it resulted in the installation of four septic systems but the original proposal called for more. The proposal was amended and the budget reduced during the October 2012 - March 2013 reporting period. Monies left-over from this proposal went toward re-programming.

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### **Summerlee Bioremediation Project - HUC: 050500040304 WBP: Wolf Creek 2009**

The project was completed ahead of schedule during the reporting period of April 2013 - September 2013. A final report is available for review.

### **West Run Phase I - HUC: 050200030309 WBP: West Run 2008**

This project supported the engineering phase and was completed as of March 2014. Construction is planned during phase II, which will be funded with WVDEP's DMR Stream Restoration Funding. A final report is available for review.

### **Watershed Based Plan Development - HUC: Multiple WBP: Several new and two revised WBPs**

This grant was used to develop several new and revise existing WBPs. Pringle and Upper Muddy from FOC was complete and submitted to EPA, there is still work that needs to be done in order for both of these plans to be approved. Both subwatersheds have insufficient information to determine the LR's needed from abandoned mine sites. Discussions continue as to how to move forward.

Revisions were completed on the Wolf Creek and Deckers Creek WBPs. Our NBC feels there are still elements needed in the Deckers Creek WBP; however, a paper copy was provided to EPA at the 2014 National meeting in Dallas. Both EPA/DEP will work to finish this plan. The Wolf Creek WBP revision is complete and will be reviewed soon by WV's NPS Coordinator and then submitted to EPA in early 2015.

Two additional WBPs are nearly complete; we expect these to be reviewed by WVDEP and later by EPA in early 2015. All reimbursements have been submitted from WVU for the Little Tenmile (West Fork) and Lick Run (Cheat) WBPs. Both are nearly complete and will be submitted in the near future. The Lower Coal WBP was also developed and is included here because technical assistance was provided by WVDEP. We didn't use any funds to develop and write the Lower Coal River WBP. The plan was recently approved is on our website.

### **Back Creek Watershed Protection Plan - HUC(s): 020700040406, 407, 408 and 409 WPP: Back Creek 2014**

This grant funded the development of WV's 2<sup>nd</sup> Watershed Protection Plan (WPP). During the October 2013 – March 2014 the WBP was reviewed and submitted to EPA. It was then revised based upon EPA comments and approved in the spring of 2014.

### **Lost River NSD - HUC: 020700030502 WBP: Lost River 2006**

The project is complete and final report is available for review. Post restoration BEHI measurements are scheduled for the summer of 2015. LR estimates provided here are based on modeling but may change slightly based on field measurements.

### **Milligan Creek Ag BMPs - HUC: 050500030903 WBP: Milligan Creek 2014**

Project was completed during the April 2014 – September 2014 reporting period. The final report is available for review.

### **Second Creek Improvements - HUC: 050500030702 WBP: Second Creek 2008**

Project was completed, significantly under budget during the April 2014 – September 2014 reporting period. There were some contractual issues/challenges. A final report is available for review.

### **Smooth Rock Lick - HUC: 050200010301 WBP: Upper Buckhannon 2006**

This project was a repair to an existing project; it was thought that the damage was due to an upstream Marcellus well pad but that could not be substantiated. Repairs were successful and the project was completed during the October 2013 – March 2014 reporting period. Sampling results in the UNT show pH consistently above 6, and we thought it might be a candidate for success; however the UNT was not listed and thus far results have not been as impressive in the mainstem. A final report is available for review.

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### **Sandy Run of Kanes Creek Improvements - HUC: 050200030201 WBP: Deckers Creek 2005**

This grant was one of many that were a result of re-programmed in FY2010. Good progress was made in a very quick period of time; it was completed during the April 2013 – September 2013 reporting period. The final report is available for review.

### **Upper Muddy Creek Improvements - HUC: 050200040708 WBP: Lower Cheat 2006**

There were major difficulties with the contractor in dealing with the upgrades needed, access roads, construction oversight etc. Valuable lessons were learned and future efforts will have better engineering plans and more frequent construction oversight. We believe that requiring, as builds if budgets can be managed to do so, may improve these types of difficulties in the future. A final report is available for review.

### **Henry St Stormwater Design - HUC: 050500040304 WBP: Wolf Creek 2009**

During April 2014 – September 2014 reporting period input from project stakeholders was received and revisions have been incorporated into the final engineering and construction plans. A copy of the final engineering plans and the final report is available for review. Note: Engineering plans are not attached within GRTS.

### **Kitchen Creek III – Phase 2 - HUC: 050500030701 WBP: Second Creek 2008**

During the April 2014 – September 2014 reporting period solar water pumping systems were repaired that effected spring development. The project is now complete and a final report is pending.

### **Piney Creek Watershed Implementation Plan - HUC: 050500040102 WBP: Piney Creek 2012**

The project is complete and the WIP to help Piney Creek prioritize future projects is completed and attached. The Piney Creek WBP has many high, medium and low priority sites throughout the area some of which may be corrected as future development continues. This WIP focused on accessible sites where partnerships were more likely.

### **Winding Gulf Stream Restoration - HUC: 050701010101 WBP: Upper Guyandotte 2006**

The project is complete but State SRF (mining) funds will be used for future invasive control/monitoring up to 5-years and riparian planting in the spring of 2015. We may also evaluate iron reductions based on sediment LRs as the project matures. The as-built report and additional information is available for review.

### **NF Greens Run Engineering Phase - HUC: 050200040705 WBP: Lower Cheat 2005**

The Railroad Refuse Phase I Engineering project consisted of the procurement of a qualified engineer to prepare a treatment design, detailed plans, and all necessary permitting for the North Fork of Greens Run Railroad Refuse project. BioMost Inc. was hired to complete the work because of their experience with acid mine drainage treatment design. The final design will consist of an oxidation-precipitation channel, an automatic flushing limestone leachbed, a vertical flow wetland, and a settling pond and polishing wetland. No permit from the US ACE was required. A final report is available for review.

### **Sovern Run Titchnell Sands Engineering - HUC: 050200040605 WBP: Lower Cheat 2005**

The Sovren Titchenell Phase I Engineering project consisted of the procurement of a qualified engineer to prepare a treatment design, detailed plans, and all necessary permitting for the Sovren Run Titchenell passive AMD treatment project. Skelly and Loy Inc. was hired to complete the work because of their experience with acid mine drainage treatment design. The final design will use two sets of limestone leachbeds and settling ponds to treat acidic water on an abandoned mine land. The permits prepared include a stream activity permit and a stormwater construction permit. No permit from the US ACE was required. A final report is available for review.

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### **Ashland Retrofits - HUC: 050702010202 WBP: North Fork Elkhorn 2007**

The purpose of this grant was to acquire the necessary components to eliminate, or greatly reduce pump failures. All screens, pumps etc. were installed where they can easily be removed for cleaning. A maintenance schedule was developed to ensure debris removal in a timely manner.

The design principles for the alternative system are a success; the system operates as designed with the exception of debris accumulating on the intake screens of the pumps. The wetland cells and drain field are working as designed. The project is a successful alternative system, showcasing ingenuity and creative thinking in locations that do not fit the profile for traditional community systems. The design is considered a step forward toward new options for smaller communities. A final report is available for review.

### **Tuscarora Dirt and Gravel Rd Remediation Prioritization - HUC: 020700040407 WBP: Tuscarora Creek 2013**

Field assessments carried out using the Penn State Center for Dirt and Gravel Road Studies' "dirty dozen" assessment tool provided a useful way to identify segments of dirt and gravel roads that contribute sediment to area streams. All of the people who participated in the workshop and in the actual field assessments found the method to be understandable and to have changed their perception of D&G roads. During actual field assessments, it could be challenging to accurately identify obscure drainage features. Also, the ability to determine if road material was reaching a stream was sometimes impossible due to private property. A final report is available for review.

West Virginia - Fiscal Year 2011, Grant [00350011](#) WV DEPT OF ENVIRONMENTAL PROTECTION

Project	Completed	Project Title
01		<a href="#">WVDEP/DWWM - Nonpoint Source Program</a>
02	✓	<a href="#">WV Conservation Agency NPS Program</a>
03		<a href="#">Kitchen Creek II</a>
04		<a href="#">Elk Run</a>
05		<a href="#">Lamberts Run Site 7</a>
06		<a href="#">Slabcamp AMD remediation</a>
07		<a href="#">Tuscarora Creek</a>
09		<a href="#">Muddy Creek of Greenbrier</a>

### **WVDEP-DWWM Nonpoint Source Program - HUC: Statewide**

All administrative activities are progressing; there is still a small balance on the grant of ~ \$14,000. All of the AGOs funded with this grant are complete, except for the OPT tree maintenance. Below are the AGOs funded by these base funds:

1. TMI's Appalachian Watershed Stream Monitoring Program
2. State Fair rain gardens
3. Lower Greenbrier State of the Watershed Report
4. Blackwater River State of the Watershed Report
5. Deckers Creek Clean Creek Program
6. Cacapon Institute's riparian restoration and education
7. Opequon Project Team tree planting maintenance
8. Piney Creek monitoring support

### **WVCA – Nonpoint Source Program - HUC: Statewide**

All administrative, planning, project development and partner support as described in the grant are nearly complete. A small balance still remains on this sub-award. Note: EPA is tracking the statewide BMP implementation efforts more

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thoroughly. WV and EPA began this effort in late 2013/early 2014 and went back to include FY11. WV's NPS Program requested this information from WVCA and still refines it before adding to GRTS. EPA assisted with the entering of the initial data sets provided.

### **Kitchen Creek II - HUC: 050500030701 WBP: Second Creek 2008**

Funds have been depleted and project is nearly complete. A final report will likely be available during the next reporting period.

### **Elk Run - HUC: 02070041107 WBP: Elks Run 2013**

During April 2014 – September 2014 reporting period The EPCD Conservation Specialist has organized and facilitated 4 public meetings. The group developed a comprehensive 12 month fecal coliform monitoring program with Friends of Shenandoah River lab, which will utilize the current monitoring budget and includes 6 sites. Freshwater Institute (FWI) completed the refinement of the Elks Run GIS and Septic Risk Index model. The model is a desktop screening assessment designed to target septic systems in the Elks Run watershed at risk of underperformance in terms of their potential to contaminate surface waters. Two failing septic systems with damaged drainfields were repaired in the Gap View subdivision. The watershed group (WG), WVCA, Downstream Project and other partners continue to do outreach throughout the watershed. Nearly 200 brochures on septic maintenance/repair and the 319 project were distributed during the Earth Day celebration and Jefferson County Fair.

### **Lamberts Run Site 7 - HUC: 050200020602 WBP: Lamberts Run 2004**

Conceptual designs are complete for Site 7. Engineering commenced during the winter of 2014 and was completed by fall of 2014. Construction will begin in the spring of 2015. Permitting is approximately 90% complete with relevant permits in the process of being obtained. NMLRC also worked with the GWF to obtain funds from the Office of Surface Mining's WCAP Program. The WCAP application was approved through the Office of Surface Mining Appalachian Region's office in Pittsburgh, PA. WCAP monies cover the remaining match shortfall.

### **Slabcamp AMD Remediation - HUC: 050200030201 WBP: Deckers Creek 2005**

In recent months significant progress has been made on Slabcamp Tributary AMD Remediation. Letters of endorsement have been received from the State Historic Preservation Office regarding Section 106 review, and the WV DNR regarding NEPA. The letters state that no historic structures or threatened or endangered species are present on the site. Also, communication has been initiated with Preston 911 regarding Floodplain Permitting and WVDNR regarding Stream Activity Permitting. Both applications will be submitted during the engineering phase. A pre-application containing a conceptual design has been submitted to the U.S. ACOE. ACOE has indicated that a Regional General permit will be required. Regional permitting will be requested from engineering firms as part of overall project design.

### **Tuscarora Creek - HUC: 020700040907 WBP: Tuscarora Creek 2013**

A project presentation was done on WRNR radio in July. Two failing septic systems scheduled to be repaired are in the process of permitting, design and securing matching funds. One septic pumping applicant was approved and sent a coupon. The septic pumping/upgrade program flier was distributed to elementary school students in the watershed for outreach to their parents. The Phase 1 archeological survey report for the Roach Dam Removal Project was submitted to the State Historic Preservation Office (SHPO) on June 27. A project presentation was done on WRNR radio in July. Two failing septic systems to be repaired are in the process of permitting, design and securing matching funds. One septic pumping applicant was approved and sent a coupon. The septic pumping/upgrade program flier was distributed to elementary school students in the watershed for outreach to their parents. The Phase 1 archeological survey report for the Roach Dam Removal Project was submitted to the State Historic Preservation Office (SHPO) on June 27.



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### **Muddy Creek of Greenbrier - HUC: 050500030804 WBP: Muddy Creek 2009**

Six septic pumping and one septic replacement contracts were implemented. Fencing was installed, impacting 50 acres and alternate water (pond and water trough) was installed.

West Virginia - Fiscal Year 2012, Grant [00350012](#) WV DEPT OF ENVIRONMENTAL PROTECTION

Project	Completed	Project Title
01		<a href="#">Upper Elk (NSD design/permitting)</a>
02	✓	<a href="#">Fayette Square Stormwater Runoff</a>
03		<a href="#">Roaring Creek</a>
04		<a href="#">WVDEP NPS Base Grant</a>
05		<a href="#">Upper Elk (Cup Run NSR)</a>
06		<a href="#">Kitchen Creek III</a>
07		<a href="#">SF Potts Creek/Sweet Springs Creek</a>
09		<a href="#">Milligan Creek/Davis Springs</a>
10	✓	<a href="#">WV Conservation Agency NPS Program</a>
11		<a href="#">Lick Run WBP</a>
12		<a href="#">Knapp Creek NSD/BMP Monitoring</a>

### **WVDEP – NPS Program Base Grant - HUC: Statewide**

All administrative, planning, project development etc. is progressing as expected. AGOs funded with this grant are also progressing. PCWA pet-waste station project is complete and FOCs citizen's watershed project implementation guide is moving forward. Very little progress is occurring with the others. The AGOs funded with these base monies include:

1. Friends of Lower Greenbrier rain garden demo
2. Rehabilitation of the National Fish Hatchery wetlands
3. Monitoring support - Davis Creek
4. Monitoring support - Deckers Creek
5. FOC's Citizen Project Implementation Guide
6. Elk Conservation District's NSR demo
7. Piney Creek pet waste stations

### **WVCA – Nonpoint Source Program - HUC: Statewide**

This grant was completed during the October 2013 – March 2014 reporting period. All milestones listed were completed on-time or ahead of schedule. BMPs implemented are provided as an attached xls file and the HUC12s, BMPs and LRs were entered by EPA and WV's NPS Coordinator. Semi-annual reports are available for review.

### **Upper Elk (NSD design/permitting) - HUC: 050500070101 WPP: Upper Elk**

Most of the funds for design have been spent. The project team reviewed the design and recommended some slight revisions. These will likely be completed within the next reporting period.

### **Upper Elk (Cup Run NSR) - HUC: 050500070101 WPP: Upper Elk**

The project team is working with ILF to get mitigation money for this project to retrofit a bridge and culvert at the upper end of the project reach. Thus far DOH is working with the Corps to get the approval to move forward with the new bridge.

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The cost estimate came back within the amount of money that is available and they are on track. Now, we need the Corps to concur, which we think will happen. TU will need to present the project to the IRT in Jan 2015 to get their approval.

### **Fayette Square Stormwater Runoff - HUC: 050500040304 WBP: Wolf Creek 2009**

As per contractual agreement, Aspen Landscaping shall maintain all plantings for two years. In the spring of 2014 all plantings will be inspected and replaced if needed. The project has been completed under budget. A final report is available for review.

### **Roaring Creek - HUC: 050200010406 WBP: Roaring Creek 2012**

NMLRC has been unable to obtain partnership from the Save the Tygart Watershed Association. Communications have been established, and are ongoing, with the National Chapter of Trout Unlimited (TU) and local Mountaineer Chapter of Trout Unlimited (MTU). TU has an Eastern Abandoned Mine Program that works on projects within the boundary of Pennsylvania that are very similar to the Kittle Headwaters/Mars Portal project. Initial concerns over the project are in regards to feasibility of successful treatment with passive methods; landowner insurance requirements; and ability to provide sufficient manpower to oversee the project in West Virginia. Internal discussions are still in progress with TU and MTU and they've been asked to return a yes/no decision towards the beginning of November.

When matching funds are obtained, engineering will begin on the site. Construction of the passive treatment system will commence after engineering is complete. Pre-construction sampling has been completed. Permits submitted previously to the USACE have not been returned. Attempts are ongoing to determine the status of these submitted permits. Most likely, they will be resubmitted once a non-profit makes a commitment to the project.

### **Kitchen Creek III - HUC: 050500030701 WBP: Second Creek 2008**

WVCA and contractors repaired the solar water system on Dough Dransfield's farm. No additional load reductions reported.

### **SF Potts Creek/Sweet Springs Creek - HUC: 020802010401 WBP: Potts Creek 2012**

When the Potts Creek/Sweet Springs Creek Project was proposed there was an additional 60% of livestock within the watershed. Since the project was proposed, one large producer passed away and several others have either scaled down their operation or quit farming completely. This drastically reduced the total number of BMP's and overall load reductions. There are still at least two projects that will be completed within the watershed, but will not require the total funds allocated to the project.

\$100,000 from this proposal will be moved to a new project in the Knapp Creek watershed (Project # 12), which is WV's NWQI basins.

### **Milligan Creek/Davis Springs - HUC: 050500030903 WBP: Milligan Creek 2014**

About 4,400 ft of fencing installed on several farms around ponds and karst areas. Pipelines for alternate watering systems also installed. An agricultural field day was held (70 participants).

### **Knapp Creek NSD/BMP Monitoring - HUC: 050500030202 WBP: Knapp Creek 2013**


This project was recently approved near the latter portion of this semi-annual reporting period. Grant funds have been awarded to WVCA but these funds have not yet been transferred to the Greenbrier District. NRCS is a major partner in this effort.

### **Lick Run WBP - HUC: 050200040605 WBP: Lower Cheat; Note: The WBP is currently under development**

Sampling is currently taking place in the Lick Run watershed in order to construct a WBP. Three rounds of quarterly water chemistry sampling have been completed, with the fourth and final round underway. The first round of benthic and coliform sampling has been completed. After sampling is completed, the writing of the WBP will begin.

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West Virginia - Fiscal Year 2013, Grant [00350013](#) WV DEPT OF ENVIRONMENTAL PROTECTION

Project	Completed	Project Title
01		<a href="#">WVCA Nonpoint Source Program</a>
02		<a href="#">Sleepy Creek Phase II</a>
03		<a href="#">Knapp Creek and NWQI</a>
04		<a href="#">Summerlee AMD Remediation – Phase 1.2</a>
05		<a href="#">WVDEP Nonpoint Source Program</a>
06		<a href="#">Second Creek Karst</a>
07		<a href="#">Ingrand mine remediation - Valley highwall upgrades</a>
08		<a href="#">Upper Muddy Creek 2.1 (Schwab)</a>
09		<a href="#">Roaring Creek - Portal 5 Project</a>

### **WVDEPs – Nonpoint Source Program - HUC: Statewide**

All administrative activities are progressing as intended. AGO progress is ahead of schedule, with about 30% of those funds expended. Base funds are also used for EPA (in-kind) watershed tracking and Big Bear AMD re-engineering project. AGOs funded in this fiscal year include the following:

1. Monitoring support - Friends of the Hughes
2. Monitoring support - Morris Creek
3. TMI's Appalachian Watershed and Stream Monitors Program

### **WVCA – Nonpoint Source Program - HUC: Statewide**

Administrative activities etc. associated with this grant are progressing as anticipated. Approximately 60% of the funds have been spent.

### **Sleepy Creek II - HUC(s): 020700040205, 203 and 201 WBP: Sleepy Creek 2008**

During the reporting period the Sleepy Creek Project Team continued working to identify and pursue potential projects and conduct outreach throughout the watershed.

With state matching funds, WVCA developed an infiltration model that demonstrates the difference between runoff and infiltration rates on lawns vs. in rain gardens. A brochure, outlining the assistance available through the 319 program was also created by WVCA using state matching funds. A very successful agricultural field day was held in mid-September, 62 attended. A wide variety of conservation practices were described as participants rotated through stations; a station on aquatic invertebrates describing their role in evaluating WQ was also included.

### **Knapp Creek and NWQI - HUC: 050500030202 WBP: Knapp Creek 2013**

NRCS implemented several NWQI BMPs during this reporting period, including tree/shrub establishment, critical areas plantings and fencing. Additionally WVCA installed 185 ft of pipeline for alternate water and 750 ft of exclusion fencing.

### **Summerlee AMD Remediation – Phase 1.2 - HUC: 050500040304 WBP: Wolf Creek 2009**

During this time period the engineered terrace was monitored, and monthly water samples were collected. New iron terraces are developing and load reductions have been documented. A final inspection of Phase 1.2 was completed by the WVDEP Southern Basin Coordinator on 7/30/14. WQ data is still being collected to assess the performance of the newly constructed iron terrace and data collection at site S-1 has continued to be monitored monthly (which captures all drainage from the site, including Phase 1.1 and 1.2). A final report is available for review.

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### **Second Creek Karst - HUC: 050500030702 WBP: Second Creek 2008**

No progress to report; however, significant progress is expected during the next reporting period.

### **Ingrand mine remediation – Valley highwall upgrades - HUC: 050200030201 WBP: Deckers Creek 2005**

In August of this reporting period FODC initiated a crowdfunding campaign to purchase the 3.19 acres of land to implement this project. The transaction was successful and FODC took ownership of this property on August 12, 2014. Due to considerable cost of the Ingrand Mine AMD remediation construction, the planned alterations to the Valley Highwall 3 AMD remediation site need to be postponed and completed under future funding.

### **Upper Muddy Creek 2.1 - HUC: 050200040703 WBP: Lower Cheat; Note: A WBP for Muddy Creek is currently under development**

The primary activity completed during the performance period was construction oversight. The notice of award was delivered to Williams Excavating on April 16, 2014, for the construction contract for the Upper Muddy project. Completion deadlines were outlined in the contract agreement that the project was to be complete by August 1 for the Improvements part of the project and September 15 for the Extension part of the project. Williams Excavating did not produce the necessary paperwork to allow FOC to deliver a Notice to Proceed until July 17, 2014, less than two weeks before the first deadline in the contract. The contractor verbally admitted that he had lost track of the timeline for the project and was busy working on other projects.

### **Roaring Creek – Portal 5 - HUC: 050200010406 WBP: Roaring Creek 2012**

The National Mine Land Reclamation Center (NMLRC) is currently attempting to identify a partnering watershed group or non-profit 501-C3 group for the project. Pre-construction sampling has been completed. Once a partner is identified, NMLRC will work with them to apply for Watershed Cooperative Agreement Program (WCAP) funds to assist with project construction costs and to solicit an engineering firm for permit applications and project design.

West Virginia - Fiscal Year 2013, Grant [00350014](#) WV DEPT OF ENVIRONMENTAL PROTECTION

Project	Project Title
01	<a href="#">WVDEP NPS Program Funds</a>
02	<a href="#">WVCA NPS Program Funds</a>
03	<a href="#">Kanes Creek South Site 1 Upgrade</a>
04	<a href="#">Lick Run Portals AMD Remediation Phases 1-2</a>
05	<a href="#">Milligan Creek/Davis Spring II</a>
06	<a href="#">Sleepy Creek Phase III</a>
07	<a href="#">Sovern England AMD Remediation</a>
08	<a href="#">Valley Point 12 - Revitalization</a>

### **WVDEP's – Nonpoint Source Program - HUC: Statewide**

Administrative, planning and staff activities are on schedule. AGOs funded with this grant include a monitoring partnership with WV Rivers Coalition and Trout Unlimited and a stormwater project in the Fourpole Creek watershed, downtown Huntington. Funds have been awarded to the WVRC project and it is moving ahead. The workplan has been approved for the stormwater project.

## APPENDICES

### **WVCA – Nonpoint Source Program - HUC: Statewide**

Statewide activities are moving forward as planned. Statewide BMPs, LRIs and their associated HUC12 (some with latitude and longitude coordinates) have been entered into GRTS. A semi-annual report is also available; the summary not including BMP/LRIs is provided below.

- Stream monitoring: 43 sites on 8 streams
- Stormwater workshops: 5 programs/160 attendees
- NPS education programs: 22 programs/1056 attendees
- 6 Ag field days/644 attendees

### **Kanes Creek South Upgrades - HUC: 050200030201 WBP: Deckers Creek 2005 (Currently under revision)**

Minor progress thus far includes site visits and some limited WQ sampling.

### **Valley Point 12 Revitalization - HUC: 050200030201 WBP: Deckers Creek 2005 (Currently under revision)**

Minor progress thus far includes site visits and some limited WQ sampling.

**Important Note:** Friends of Deckers Creek (FODC) water remediation manager has recently resigned, however the organization is in the process of hiring a replacement. In the interim WVDEP's Northern Basin Coordinator is working with FODC's Exe Director to keep past and current projects on task.

### **Lick Run Portals AMD Remediation Phase 1-2 - HUC: 050200040702 WBP: Lower Cheat 2005**

Since the award of the project in June, 2014, FOC was informed from WV DEP AML that the land reclamation activities will not be complete until the year 2016 or 2017. FOC is currently considering options.

### **Milligan Creek/Davis Springs II - HUC: 050500030903 WBP: Milligan Creek 2014**

No progress to report, however progress is expected during the next reporting period.

### **Sleepy Creek Phase III - HUC(s): 020700040205, 203 and 201 WBP: Sleepy Creek 2008**

No progress to report. The funds are just now getting ready to transfer to the local Conservation District office.

### **Sovern England AMD Remediation - HUC: 050200040605 WBP: Lower Cheat 2005**

Since the award of the project in June, 2014, FOC was informed from WV DEP AML that the land reclamation activities will not be complete until the year 2015 or 2016. FOC is planning to start engineering the project immediately after land reclamation. The milestone schedule has been adjusted. FOC and WV DEP will attempt to work together so that the timeframes for the 319 funds and the AML construction schedule can align favorably.

## APPENDICES

West Virginia - Fiscal Year 2014, Grant [00350015](#) WV DEPT OF ENVIRONMENTAL PROTECTION

Project	Project Title
01	<a href="#">WVDEP's NPS Program</a>
02	<a href="#">WVCA's NPS Program</a>
03	<a href="#">Big Sandy Watershed Planning</a>
04	<a href="#">Elks Run</a>
05	<a href="#">Tuscarora Creek</a>
06	<a href="#">Mill Creek Opequon</a>
07	<a href="#">Piney Creek Barren Land Restoration</a>
08	<a href="#">Pase Active Treatment Improvements</a>
09	<a href="#">Summerlee AMD Remediation - Phase 2</a>
10	<a href="#">Herods Run</a>
11	<a href="#">Morris Creek AMD Restoration</a>

The workplans for 2014/2015 were submitted to EPA in mid-August 2014. WVDEP's NPS Coordinator responded to fiscal and technical comments and the grant has tentative approval. A partial allocation has been awarded but no awards have been provided to sub-grants. It is important to note that a significant amount of leveraging is will be applied in order to complete many of the above proposals.

Chesapeake Bay Program Funds will be used to complete a significant portion of Elks Run, Tuscarora and Mill Creek Opequon projects. Workplans for these were submitted to the CB program. The CB program does not fund septic programs so the 319 portions will focus on septic tank repair/pumping, monitoring, outreach and agricultural BMPs.